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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,679	12/21/2001	Edward M. Dexheimer	12099	4997

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BASF CORPORATION  
LEGAL DEPARTMENT  
1609 BIDDLE AVENUE  
WYANDOTTE, MI 48192

EXAMINER

KEYS, ROSALYND ANN

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 07/14/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/036,679

Applicant(s)

DEXHEIMER, EDWARD M.

Examiner

Rosalynd Keys

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Status of Claims***

1. Claims 1-60 are pending.

Claims 1-60 are rejected.

***Information Disclosure Statement***

2. The information disclosure statements filed September 18, 2002 and December 18, 2002 have been considered, except for U.S. Serial No. 10/037,958 and U.S. Serial No. 10/036,928. These applications are not easily accessible to the examiner. Thus, the applicant is asked to provide a courtesy copy of the claims for these two applications in order for them to be considered.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Edwards (US 4,721,817) alone or in view of Reichel et al. (US 6,103,850).

The polyether polyols disclosed by Edwards appear to be identical or only slightly different from the polyether polyols of the instant invention (see entire disclosure, in particular column 4, lines 7-49, and column 9, line 33 to column 10, line 10).

The instant claims differ from Edwards when the polyether polyols are heteric polyether polyols, end capped polyether polyols or prepared from oligomeric initiators.

Reichel et al. teach that the structure of polyether polyols can vary widely depending upon the desired application (see column 2, line 60 to column 3, line

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45). In particular, it is disclosed to be known to prepare heteric polyether polyols (see column 3, lines 17-37) and terminal capped polyols (see column 3, lines 38-45).

One having ordinary skill in the art at the time the invention was made would have found it obvious to vary the structure of the polyether polyols of Edwards, as taught by Reichel et al., depending upon the desired application of the polyether polyol.

7. Claims 1-3, 6-22, 24-30, 32-35, 38-42, 46-49, 51-54 and 56-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pazos et al. (US 5,919,988).

The instant invention is directed to a polyether polyol, which is made by a particular process, i.e., a product-by-process.

Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The polyether polyols disclosed by Pazos et al. appear to be identical or

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only slightly different from the polyether polyols of the instant invention (see entire disclosure, in particular column 1, lines 19-24; column 3, lines 32-38; column 3, line 56 to column 4, line 4; column 4, lines 14-32; column 4, lines 50-56, column 5, line 19 to column 6, line 65; column 7, lines 16-50; column 8, lines 16-67; column 9, lines 31-58; examples 1-5, 7, 12-15 and 18; and Tables 2 and 3). Like the polyether polyols of the instant invention the polyether polyols disclosed by Pazos et al. have low unsaturation (see column 8, lines 56-59); they do not require removal of the catalyst from the finished polyether polyol product (see column 5, lines 19-25); they have a reduced amount of high molecular weight tail, thus allowing for a much easier formulation into polyurethane systems (see column 4, lines 14-32); and unlike polyether polyols produced using base catalysts they have a narrow molecular weight distribution (see column 1, lines 19-60).

Pazos et al. do not exemplify an ethylene oxide capped polyether polyol. However, Pazos et al. disclose preparation of a propylene oxide end capped polyether (see examples 12-15 and Table 3). One having ordinary skill in the art at the time the invention was made would have found it obvious to utilize any of the epoxides disclosed by Pazos et al., including ethylene oxide, to end cap their polyether product, since the skilled artisan would have reasonably expected the epoxides to react similarly.

Pazos et al. further differ from claim 31 in that the terminal caps of Pazos et al. comprise 25% of the polyether polyol. However, one having ordinary skill in the art would have found it obvious to modify the amount of alkylene oxide introduced at the end of the polymerization in order to obtain a polyether polyol having the desired degree of end capping.

8. Claims 1-42 and 46-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Reichel et al. (US 6,103,850).

The polyether polyols disclosed by Reichel et al. appear to be identical or only slightly different from the polyether polyols of the instant invention (see entire disclosure, in particular column 2, line 53 to column 12, line 44 and the examples). Like the polyether polyols of the instant invention the polyether polyols disclosed by Reichel et al. have many advantages including low unsaturation (see column 4, lines 37-48).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalyn Keys whose telephone number is 703-308-4633. The examiner can normally be reached on M and F 3:00-8:00 pm and T-R 5:30-10:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 703-308-4532. The fax phone numbers for the organization where this application or proceeding is

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assigned are 703-872-9306 for regular communications and 703-872-9307 for  
After Final communications.

Any inquiry of a general nature or relating to the status of this application  
or proceeding should be directed to the receptionist whose telephone number  
is 703-308-1235.

*R. Keys*  
R. Keys  
July 11, 2003

*Rosalynd Keys*  
Rosalynd Keys  
Primary Examiner  
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